

AMENDMENT TO CLAIMS

1.-77 (canceled)

78. (new) A passive impedance device for creating a voltage differential when time variant current is applied to a tubular connected to a top and bottom connection to the passive impedance device, the passive impedance device comprising:

a tubular having a threaded connection at a first end of the tubular and a threaded connection at a second end of the tubular;

a plurality of subsections surrounding the tubular, each subsection comprising a plurality of layers of a ferromagnetic alloy, each layer separated by an electrically insulating material;

a non-electrically conductive insulator between each of the subsections; and

a protective covering over the plurality of subsections.

79. (new) The passive impedance device of claim 78 wherein the protective covering is a shrink-wrapped polymer tube.

80. (new) The passive impedance device of claim 78 wherein the protective covering is a shrink-wrapped polymer sheet.

81. (new) The passive impedance device of claim 78 wherein the ferromagnetic alloy comprises about 86%nickel and about 14% iron.

82. (new) The passive impedance device of claim 78 wherein the ferromagnetic alloy has a magnetic permeability of about 50,000.

83. (new) The passive impedance device of claim 78 wherein the non-electrically conductive insulator between each of the subsections is a polymeric washer.

84. (new) The passive impedance device of claim 83 wherein the polymeric washer is a polytetrafluoroethylene washer.

85. (new) The passive impedance device of claim 78 wherein the subsections each comprise about 60 layers of the ferromagnetic alloy.

86. (new) The passive impedance device of claim 78 wherein each of the layers of ferromagnetic alloy is about 0.014 inches in thickness.

87. (new) The passive impedance device of claim 78 further comprising an electrical conductor passing from a connection to first end of the tubular extending outside of the subsections to a terminal near the second end of the tubular.

88. (new) The passive impedance device of claim 87 further comprising an electrically operated device driven by voltage differences between the terminal and an electrical connection at the second end of the tubular.